

CLAIMS

We claim:

1. An apparatus, comprising:

a first manager component that performs one or more first management operations on
5 a software and/or hardware entity; and

a second manager component that performs one or more second management operations on the software and/or hardware entity.

2. The apparatus of claim 1, wherein the first manager component and the second manager component are communicatively coupled.

10 3. The apparatus of claim 2, wherein the first manager component and the second manager component coordinate the one or more first and second management operations to occur in a proper sequence.

4. The apparatus of claim 1, wherein upon detection by the first management component of an event associated with the software and/or hardware entity, the first manager
15 component sends a notification to the second manager component;

wherein upon detection by the second management component of an event associated with the software and/or hardware entity, the second manager component sends a notification to the first manager component.

5. The apparatus of claim 1, wherein the software and/or hardware entity comprises one or more software and/or hardware components;

wherein the first manager component starts up the software and/or hardware entity and the one or more software and/or hardware components;

5 wherein the first manager component sends a notification to the second manager component to indicate that the software and/or hardware entity and the one or more software and/or hardware components have been started.

6. The apparatus of claim 5, wherein the second manager component initializes one or more of the one or more software and/or hardware components;

10 wherein the second manager component sends a notification to the first manager component to indicate that the one or more of the one or more software and/or hardware components have been initialized.

7. The apparatus of claim 1, wherein the software and/or hardware entity comprises one or more software and/or hardware components;

15 wherein the first and second manager components cooperate to initialize, monitor, and detect one or more failures of the software and/or hardware entity and one or more of the one or more software and/or hardware components.

8. The apparatus of claim 7, wherein the first and second manager components cooperate to recover the software and/or hardware entity from the one or more failures.

20 9. The apparatus of claim 1, wherein the first manager component sends a request to the second manager component to cause the second manager component to perform a management operation of the one or more second management operations on the software and/or hardware entity.

10. The apparatus of claim 1, wherein one or more of the first and second manager components comprise high availability services software.

11. The apparatus of claim 1, in combination with the software and/or hardware entity, wherein the second manager component comprises high availability services software
5 operating in a high availability domain;

wherein the software and/or hardware entity operates outside of the high availability domain, wherein the software and/or hardware entity interacts with the high availability domain.

12. The apparatus of claim 11, wherein the software and/or hardware entity is
10 connected with the high availability domain to employ one or more of the one or more second management operations of the high availability services software.

13. The apparatus of claim 12, wherein the software and/or hardware entity is connected with the first manager component to employ one or more of the one or more first management operations and to prevent autonomous control of the software and/or hardware
15 entity by the high availability services software.

14. The apparatus of claim 1, in combination with the software and/or hardware entity, wherein the first manager component, the second manager component, and the software and/or hardware entity are responsible for one or more of setup and teardown of telecommunication connections.

15. The apparatus of claim 1, wherein the software and/or hardware entity comprises one or more first software and/or hardware components and one or more second software and/or hardware components;

wherein the first manager component controls the one or more first software and/or
5 hardware components;

wherein the second manager component controls the one or more second software and/or hardware components.

16. A method, comprising the steps of:

configuring a software and/or hardware entity for partial control by a first manager component and partial control by a second manager component.

17. The method of claim 16, wherein the step of configuring the software and/or hardware entity for partial control by the first manager component and partial control by the second manager component comprises the step of:

allowing the software and/or hardware entity to accept one or more first management operations from the first manager component and one or more second management operations from the second manager component, wherein the first and second manager components cooperate to initialize, monitor, and detect failures of the software and/or hardware entity.

18. The method of claim 16, wherein the second manager component comprises high availability services software operating in a high availability domain, the method further comprising the steps of:

operating the software and/or hardware entity outside of the high availability domain; and

connecting the software and/or hardware entity with the high availability services software within the high availability domain.

19. The method of claim 16, further comprising the step of:

sending one or more notifications between the first manager component and the second manager component to indicate occurrence of one or more events associated with the software and/or hardware entity.

20. The method of claim 16, wherein the software and/or hardware entity comprises one or more first software and/or hardware components, wherein the step of configuring the software and/or hardware entity for partial control by the first manager component and partial control by the second manager component comprises the steps of:

5 connecting the one or more first software and/or hardware components with the first manager component to employ one or more first management operations of the first manager component; and

connecting the one or more second software and/or hardware components with the second manager component to employ one or more second management operations of the second manager component and to prevent autonomous control of the software and/or
10 hardware entity by the first manager component.

21. An article, comprising:

one or more computer-readable signal-bearing media; and

means in the one or more media for configuring a software and/or hardware entity for partial control by a first manager component and partial control by a second manager component.

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